

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number
WO 2005/048925 A2

- (51) International Patent Classification⁷: **A61K**
- (21) International Application Number:
PCT/US2004/037572
- (22) International Filing Date:
12 November 2004 (12.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/520,539 14 November 2003 (14.11.2003) US
- (71) Applicant (for all designated States except US): **THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY [US/US]; 1705 El Camino Real, Palo Alto, California 94306-1106 (US).**
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **KNOX, Susan J. [US/US]; Stanford University Medical Center, CCSR-South, 1245A, 269 Campus Drive, MC, Stanford, California 94305-5152 (US). HUSBECK, Bryan [US/US]; 3579 Park Boulevard, Palo Alto, California 94306 (US).**
- (74) Agent: **FRANCIS, Carol L.; BOZICEVIC, FIELD & FRANCIS LLP, 1900 University Avenue, Suite 200, East Palo Alto, California 94303 (US).**

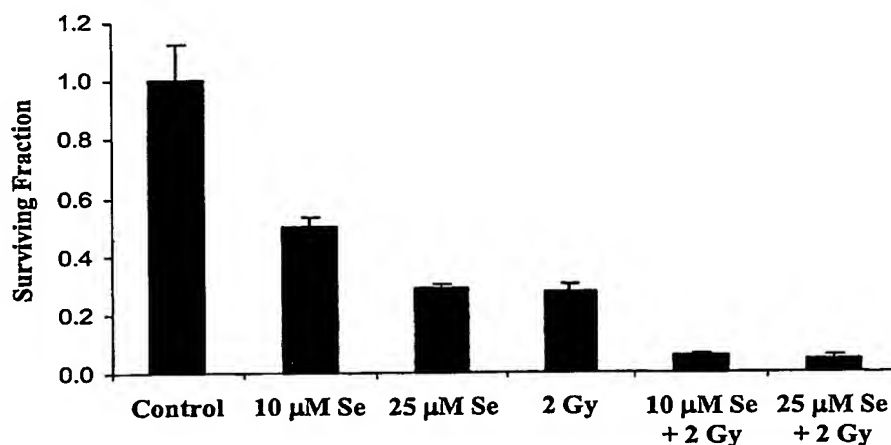
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS FOR TREATING A NEOPLASTIC DISEASE IN A SUBJECT USING INORGANIC SELENIUM-CONTAINING COMPOUNDS



(57) Abstract: The invention features methods and selenium-containing compositions for treating a neoplastic disease in a subject. In particular, the invention features methods for enhancing sensitivity of a tumor to cancer therapy by treating the tumor with an inorganic selenium-containing (iSe) compound and with a cancer therapy, particularly a cancer therapy that also affects the cellular redox status of a tumor cell (e.g., radiation).